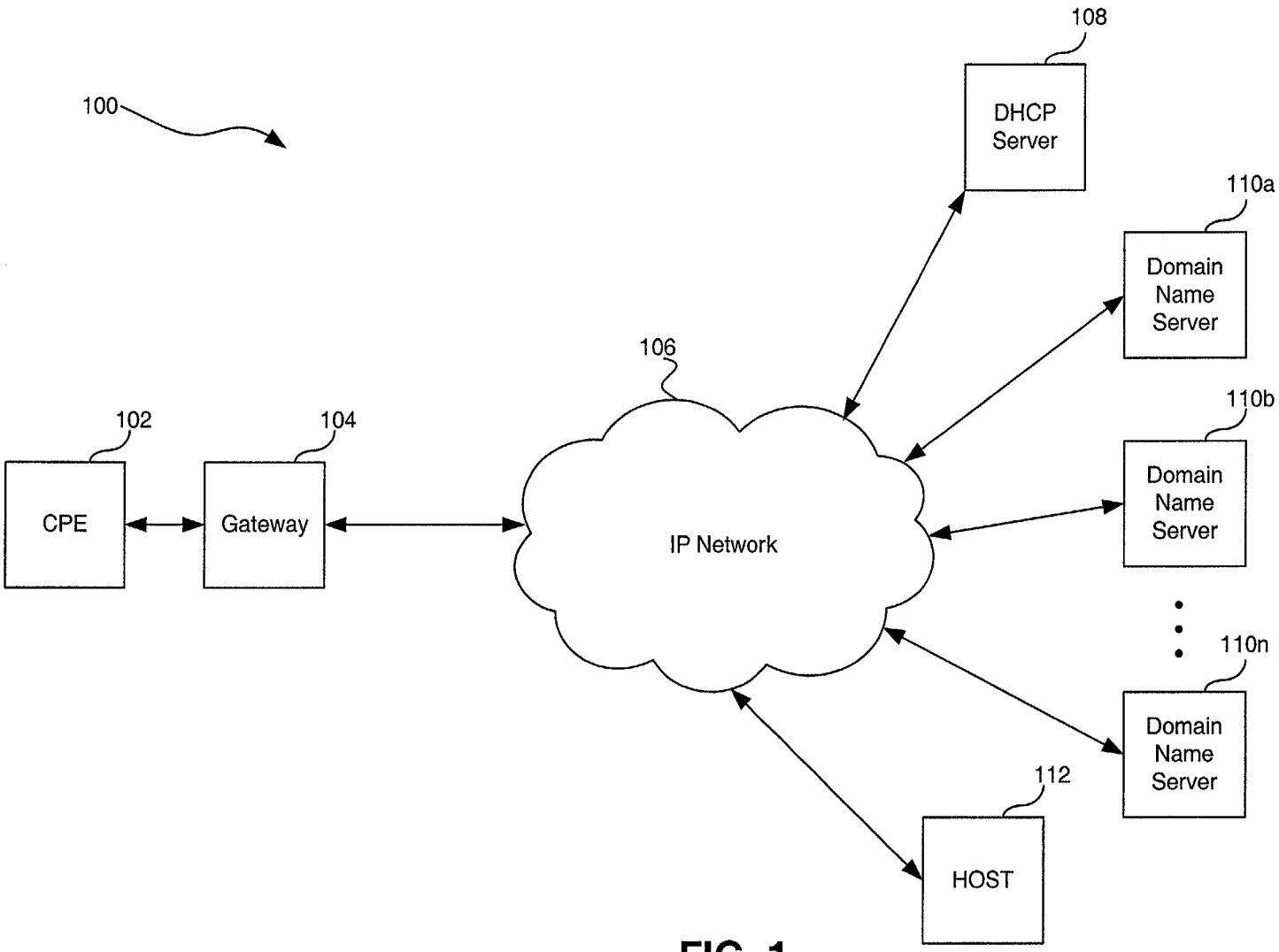

FIG. 1

0103-88.vsd/1

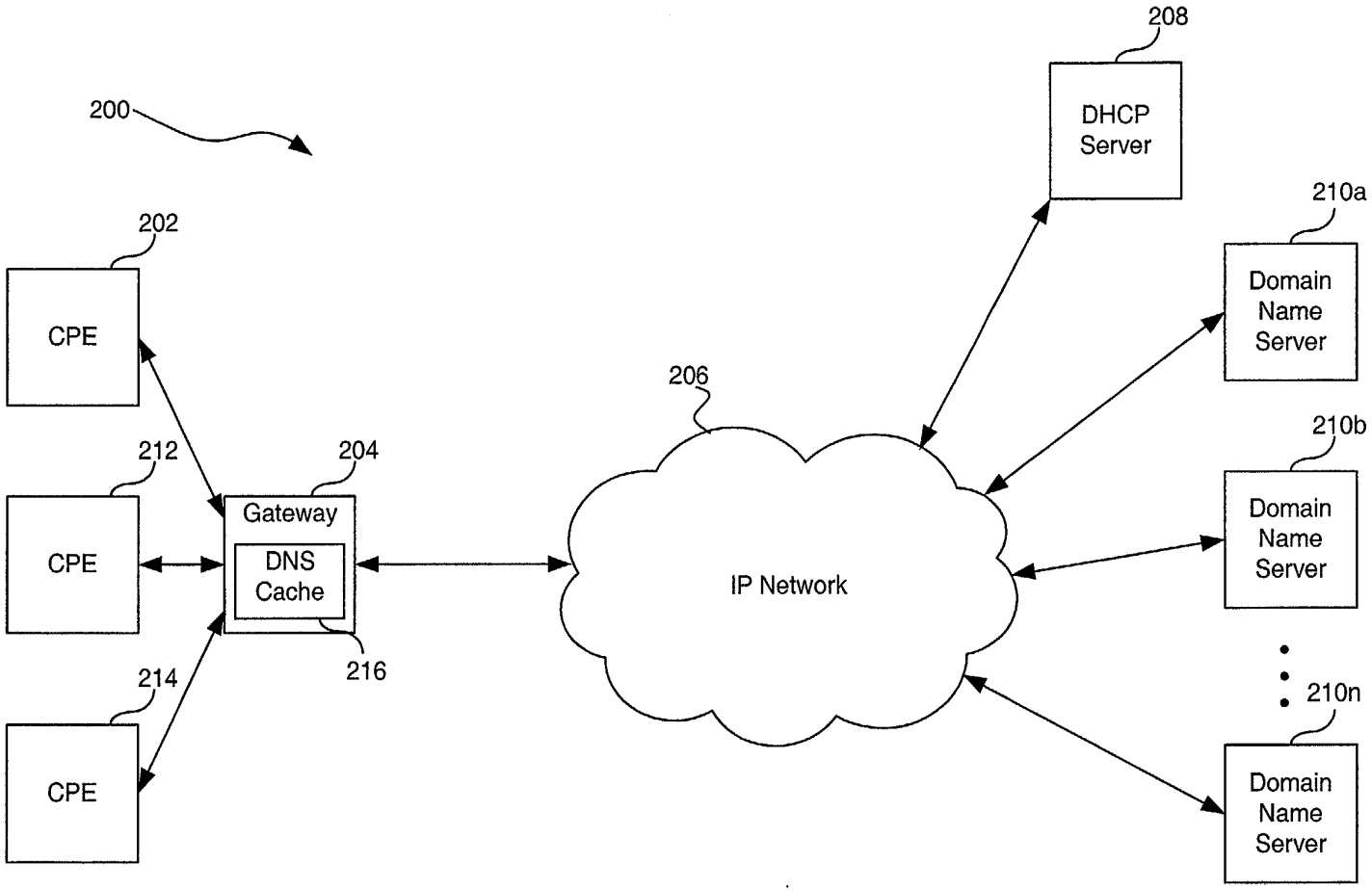

FIG. 2

0103-88.vsd/2

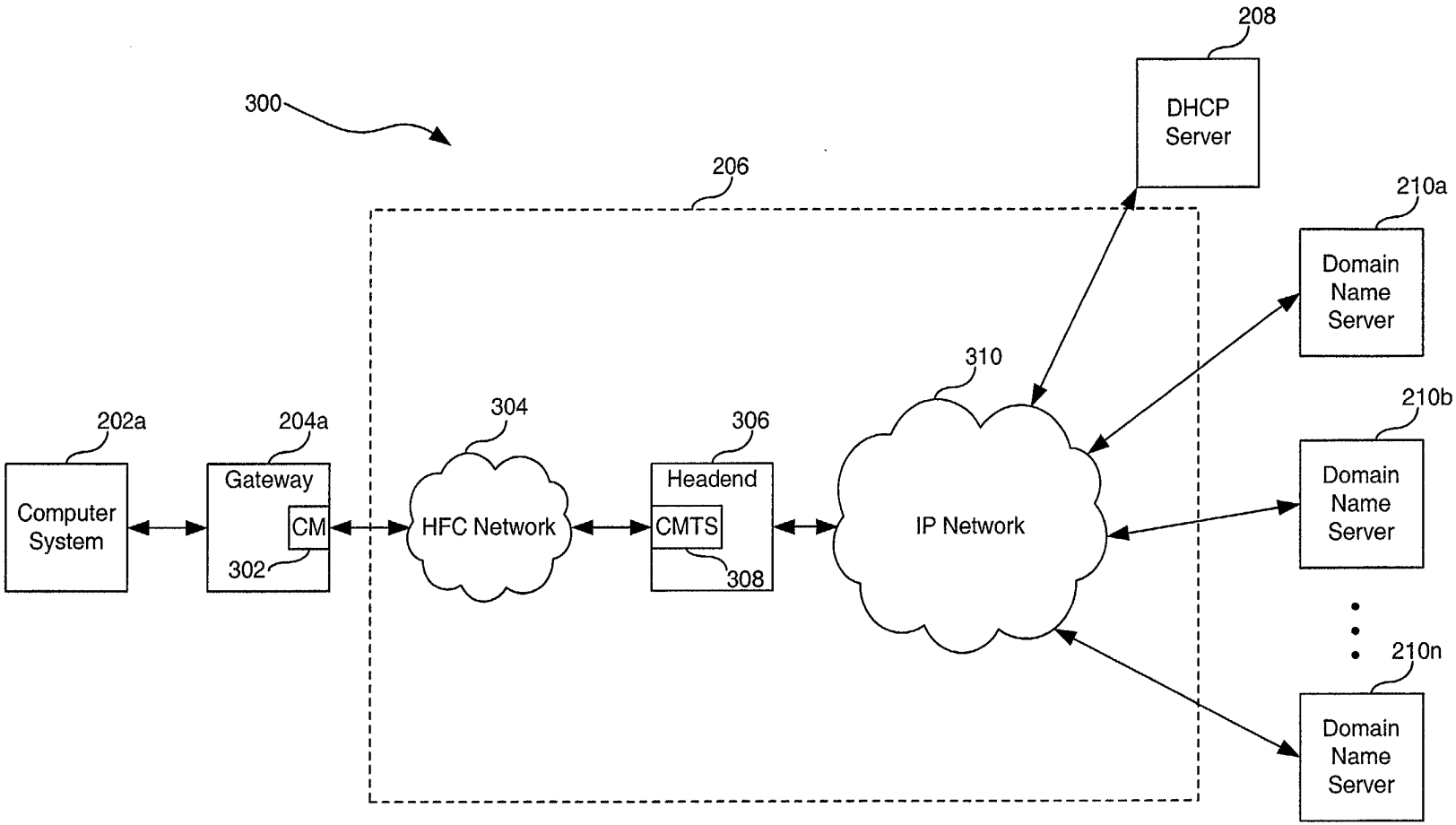

FIG. 3

0103-88.vsd/3

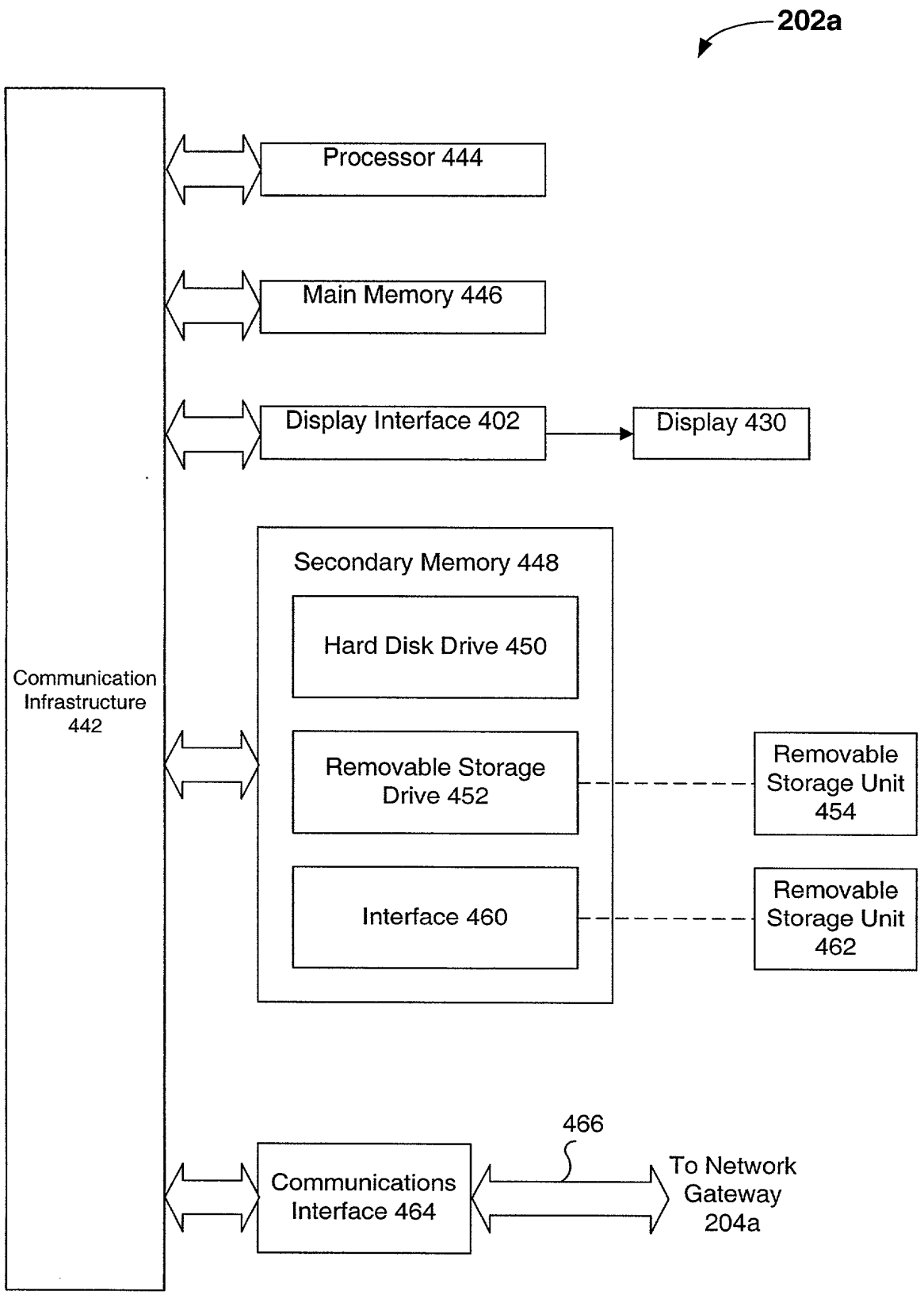

FIG. 4

0103-88.vsd/4

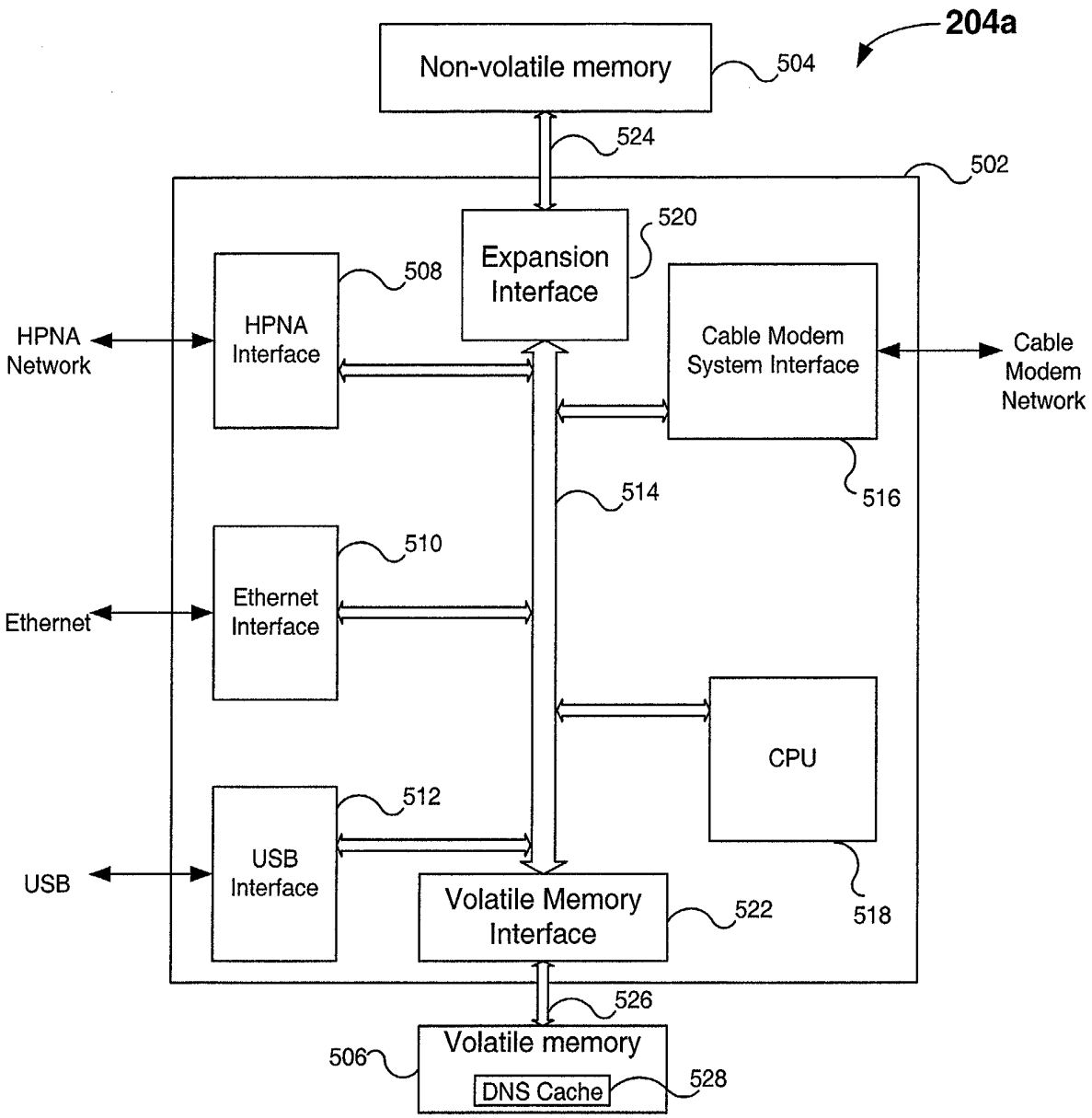

FIG. 5

0103-88.vsd/5

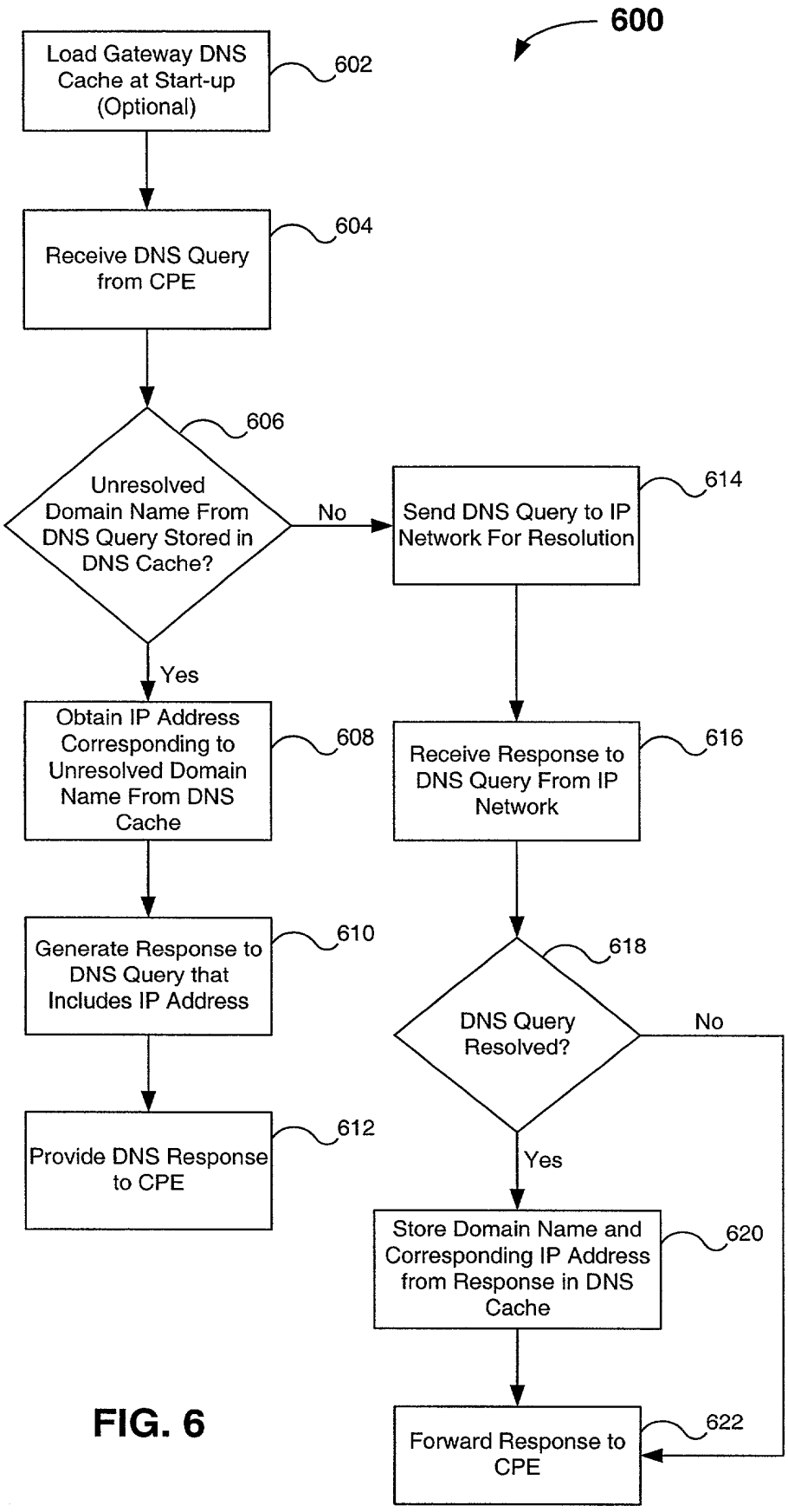

FIG. 6

0103-88.vsd/6

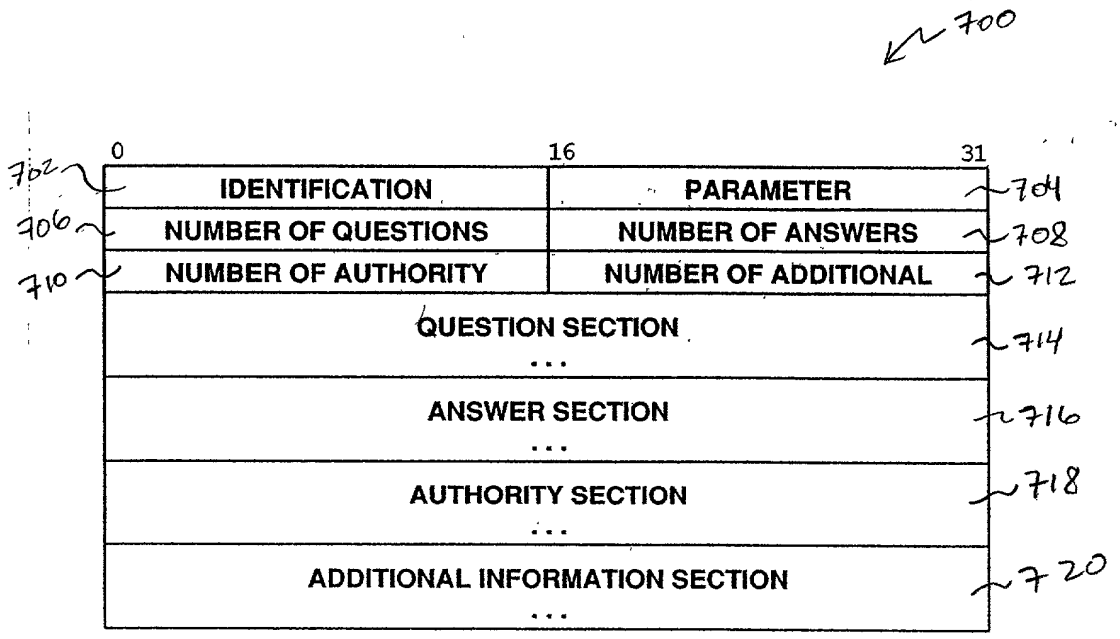

FIG. 7A

730

Bit of PARAMETER field	Meaning
0	Operation: 0 Query 1 Response
1-4	Query Type: 0 Standard 1 Inverse 2 Completion 1 (now obsolete) 3 Completion 2 (now obsolete)
5	Set if answer authoritative
6	Set if message truncated
7	Set if recursion desired
8	Set if recursion available
9-11	Reserved
12-15	Response Type: 0 No error 1 Format error in query 2 Server failure 3 Name does not exist

FIG. 7B

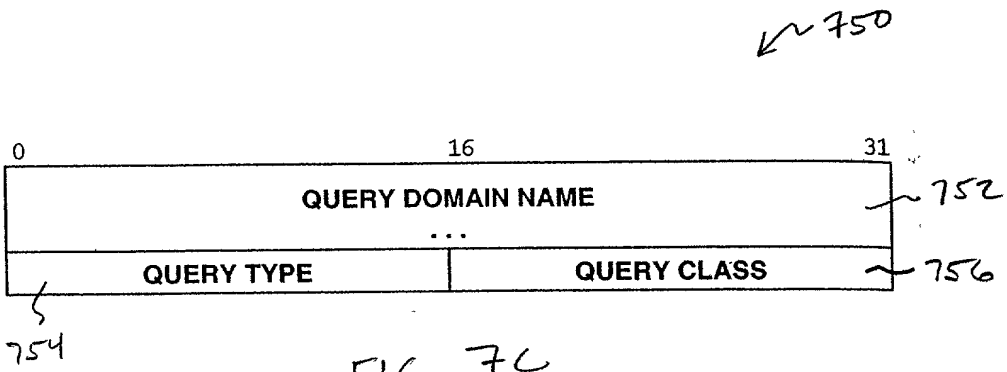
750
0
16
31
QUERY DOMAIN NAME
...
752
QUERY TYPE
QUERY CLASS
756
754

FIG. 7C

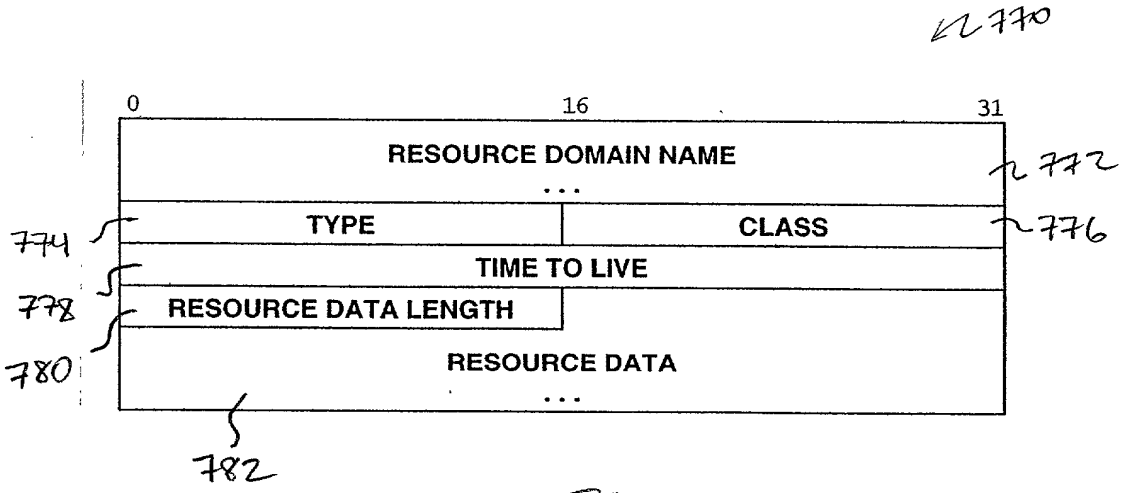
770
0
16
31
RESOURCE DOMAIN NAME
...
772
774
TYPE
CLASS
776
TIME TO LIVE
778
RESOURCE DATA LENGTH
780
RESOURCE DATA
...
782

FIG. 7D

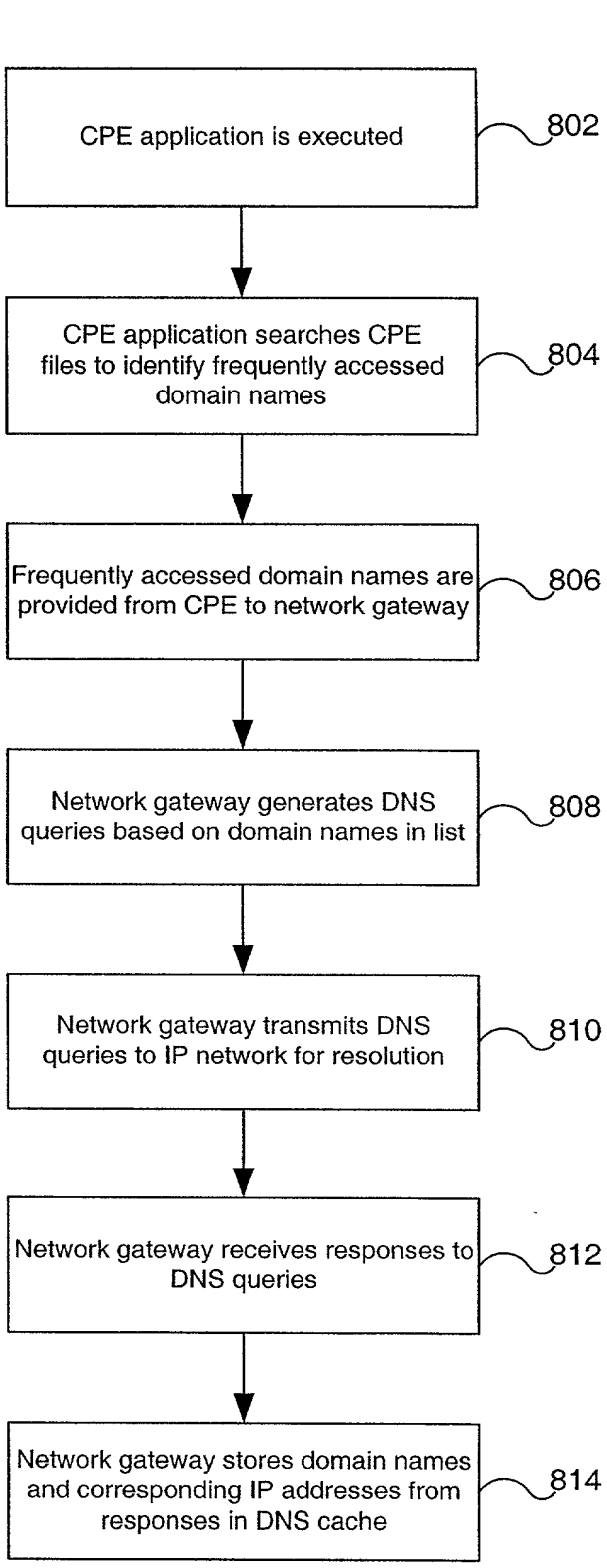

FIG. 8

0103-88.vsd/7

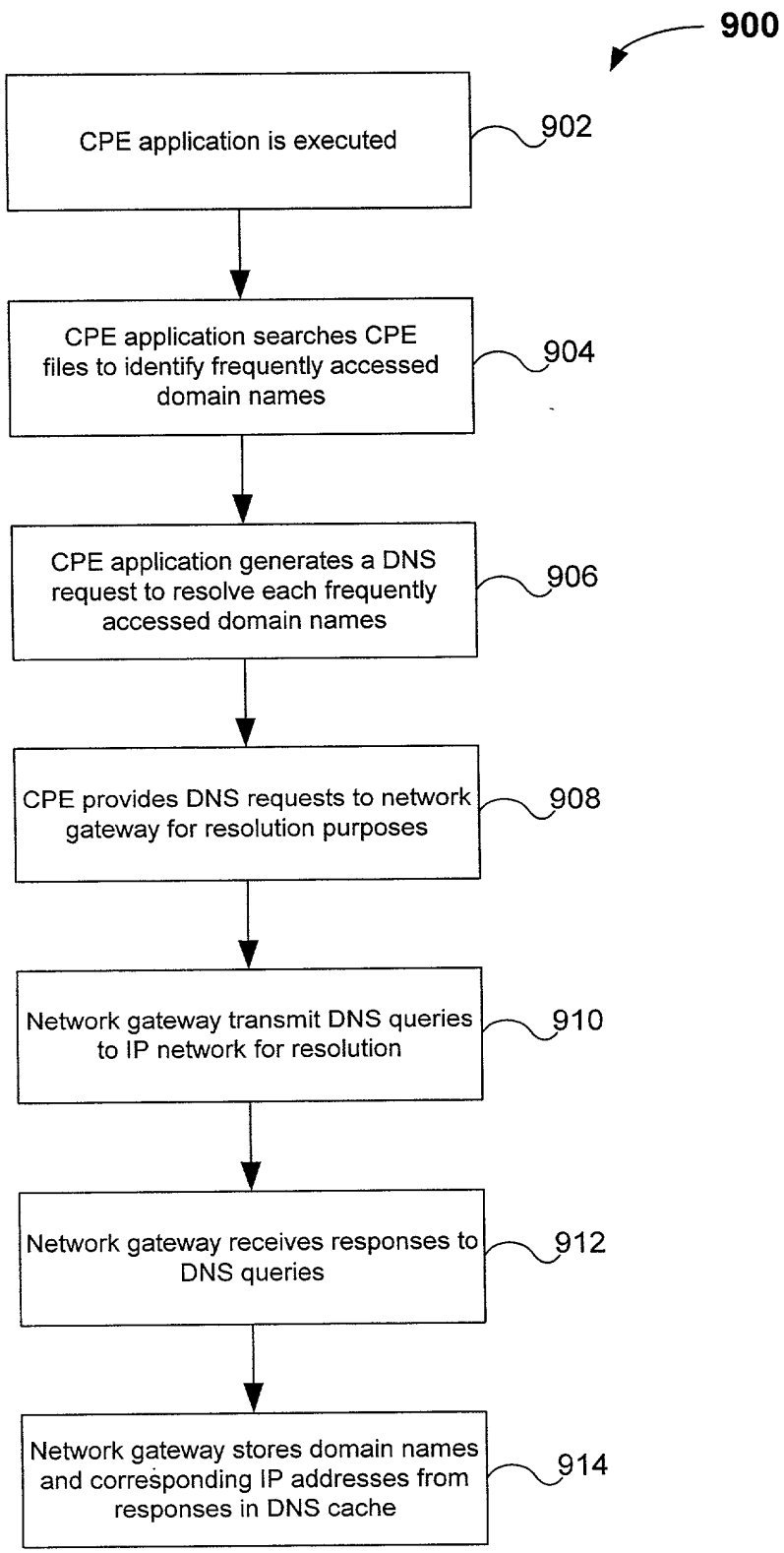
900
CPE application is executed
902
CPE application searches CPE files to identify frequently accessed domain names
904
CPE application generates a DNS request to resolve each frequently accessed domain names
906
CPE provides DNS requests to network gateway for resolution purposes
908
Network gateway transmit DNS queries to IP network for resolution
910
Network gateway receives responses to DNS queries
912
Network gateway stores domain names and corresponding IP addresses from responses in DNS cache
914

FIG. 9